

Engineering and Operations Workgroup Study Plans

Study #2: Perform Model Simulations

November 16, 2001

Goal

- Perform operation simulation modeling as needed in support of other study plan analysis
- Ensure that results provided meet the needs of the requesting study and are interpreted correctly

Task 1. – Assist Study Plan leaders in developing appropriate modeling requests

- Meet with study plan leader to discuss modeling issues including:
 - Appropriate assumptions for simulation
 - Output required
 - Interpretation of output for their purpose
- Draft modeling request
- Submit to plenary group through requestor RAM

Task 2 – Develop appropriate assumptions for the request

- Develop detailed assumptions including:
 - Facility assumptions
 - Operational assumptions
- Confirm with study plan leader

Task 3 - Determine models and model interaction required

- Develop modeling procedure including:
 - Models to be
 - Model interactions
 - Special procedures required
 - Special outputs required
- Confirm with study plan leader

Task 4 - Develop specialized analysis procedures as required

- Develop new procedures, tools, model modifications or outputs identified in Task 3

Task 5 – Run models as required

- Perform the simulations required according to the procedures from Tasks 2 – 3 including:
 - Individual model simulations
 - Model interactions
 - Model iterations
 - Result checking

Products

- Simulated operational values such as flows, water levels, temperatures, power generation
- Understanding of the results, what they represent, and how they can be used in further analysis or modeling

Task 6 - Prepare outputs

- Prepare standard outputs
- Prepare special outputs
- Meet with requesting study plan leader to deliver and discuss results